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CONTESTED CASES OF INSANITY.

MR. EDITOR,—A hasty glance, from a professional point of view, at some of the contested cases of insanity which have exercised the public mind of late, may not be out of place in your JOURNAL. The press of Philadelphia and New York, and, in one instance, of Boston, resting firmly in certain judicial decisions, has stretched out a threatening hand, as if to wipe from the face of the earth those strongholds of crime and corruption known as hospitals for the insane. No distinctions are made, and the characters of the most experienced and honored members of our profession are assailed without mercy. The public naturally suppose there must be some fire under all this smoke, and at best are little disposed to be charitable in this direction. The cases which have kindled this last blaze of indignation, like so many others which have had the brief notoriety of the courts, are *not* of the class which may be called *obscure*. On the contrary, they are clear and demonstrable cases of insanity, and recognizable even through the cloudy medium of a newspaper report.

Take the Haskell case, for instance. Dr. Ray, whose testimony is unimpeached and unimpeachable, who resides in Philadelphia, and has every means of information at hand, says:—"This very man had been pronounced insane by a jury of six, convened by a commission of lunacy, all of them well-known, respectable and responsible men." And, referring to the late trial, he says:—"The evidence showed, beyond the reach of doubt, that the man entertained delusions; that he believed he had been poisoned; that his eldest son was a changeling; that his wife, whom the slightest breath of suspicion has never reached, had been unfaithful; that he possessed certain property to which he had not the shadow of a title; that his wife was a negress, &c. With scarcely a dollar at command, he projected enterprises which would have required hundreds of thousands. His character also completely changed. . . . . He became noisy and quarrelsome, carrying about firearms and threatening to use them. He made a will so absurd that the court, with all its leaning to his side, could not explain it on any theory of sanity. . . . . . How could any case of insanity be clearer than this? What single ingredient of the disease was wanting? What criterion or test of insanity, medical or legal, did it fail to meet? If not insanity, what was it?" The jury found a verdict of sanity.

The testimony in this case, concerning the gloomy and the loathsome character of the "cells" at the Pennsylvania Hospital for the Insane, was given by a former patient, who had occupied one of them during an attack of delirium tremens, and whose diseased imagination transformed a room large, light, warmed and ventilated, and wholly, in fact, above ground, the building having but one story, being especially adapted for the humane treatment of the violently insane, to a vile dungeon! This witness, since the trial, was found dead drunk, and asleep, in the reception room of this very hospital, and had to be put out at the gate by force.

Dr. Ray takes occasion to compliment the charge of the judge, who reasoned better than he knew, as follows:—"We cannot forego the opportunity of noticing, with the strongest expressions of commendation, the criterion or test of insanity adopted by the court in this case. 'The true test in all these cases,' said the court, 'lies in the word *power*. Has the defendant in a criminal case the power to distinguish right from wrong, *and the power to adhere to the right and avoid the wrong?*' No greater advance in the law of insanity has ever been made at any one step than this. To recognize the power, not only of knowing right and wrong, but of pursuing the one and avoiding the other, as an element of legal responsibility, is also to recognize in the most decided manner the doctrine of moral insanity—that kind of insanity which, while it leaves the intellect, the perceiving, discerning and judging faculties untouched, deranges and perverts the propensities, sentiments and emotions. Unfortunately, this test had no applicability to the case in hand. That person was supposed to be intellectually as well as morally insane. We are none the less, however, under a weight of obligation to the court for this admirable test, which we hope will evermore be the rule of law in this Commonwealth."

In the Commodore Meade case, on one side was the negative evidence of sundry persons, who could see no insanity in him at the time. On the other, his relations, without dissent, affirm his insanity and its dangerous character. They testify to an attack of apoplexy confining him to his bed for a month, the paralysis accompanying which still exists; to his marked change of character after the event; to his aversion to all his relations, and his deadly hostility to several friends of his family, leading to the carrying of firearms for the avowed purpose of killing them. Surgeon Bache, of the Navy, who had known him a long time, testified to his insanity. Dr. Brown-Séquard gave the family a written opinion that his mind was impaired by the presence of an unabsorbed apoplectic clot. Dr. Brown, of Bloomingdale Asylum, where he was sent, had not the slightest doubt of his insanity. He was discharged by order of the court.

The acquittal of Gen. Cole exhibits as great an eagerness to find insanity as the other two cases to ignore it. The bias of the court was as strongly in favor of the prisoner as in the Mary Hains case, and the defence was the same—that of impulsive homicidal insanity, though with much less show of probability, the former decision being fully justified by later events. The following preposterous return of the jury will show how ready they were to take a stand far in advance of the most radical alienists.

"The foreman stated that they found the prisoner to be sane at the moment before and the moment after the killing, but they were in doubt as to his sanity on the instant of the homicide. The judge said they must give the prisoner the benefit of the doubt, and thus instructed they rendered a verdict of acquittal."

If Gen. Cole is liable to such a dangerous form of insanity, why is he at large? Moral, emotional or impulsive insanity is not a disease which begins and ends in the same act of outrage or crime. Such a theory would be dangerous in the extreme, and subversive of all wholesome legal restraint. Yet such is the popular understanding of it, and this verdict is likely to strengthen that belief; to saddle upon the medical profession a theory inconsistent with facts or common sense.

The catastrophe in a case of moral insanity *may* come like an avalanche, which has been preparing under the accumulated snow of years, but which an echo lets loose to thunder a moment and disappear. Such cases are not common, but they do exist. A man may go through life, maintaining an even contest with the hereditary gift of an insane temperament. Circumstances are favorable, and the will keeps watch and ward to prevent any public display of emotion. A crisis comes when the will sleeps, or is overpowered, and the fair fabric of a life goes down in ruins. Yet the disease was there before and remains after this downfall, ingrained into the most intimate texture of the brain. These are the obscure cases, which puzzle not only the legal brain, bound up in superficial facts and motives, and ignoring the delicate machinery of the mind, but those who are best trained to appreciate them. All the medical expert asks in such cases is, that justice should withhold her hand while the victim of suspected disease awaits in some secure place its further development. T. W. FISHER.

WHAT IS IT?

MR. EDITOR,—My attention was arrested by the interesting account of the case of a clergyman, in the last number of the JOURNAL. Perhaps an abstract of two cases, which I saw a few days since, while turning over the leaves of the *Medical Times and Gazette*, may be interesting, especially as there is a close resemblance in the symptoms.

But, first, a word or two in regard to the seat of the lesion or prostration. It seems as though the case was one sufficiently well marked as a case of paralysis of motor power, from some central cause; and that cause may be found in exhaustion of the cord from excessive activity in the performance of its functions, or in some more serious lesion affecting more especially the motor tract.

In examining the place where lesion might occur to produce the symptoms, we find that five conditions are possible:—

1st. There might have been loss of muscular irritability.

2d. The conducting power of the nerves may have been lost.

3d. There may have been lesion of the motor roots of the nerves.

4th. A lesion of the cord.

5th. A lesion of the encephalon.

1st. It is not likely that the muscular irritability would have been so generally lost in all the muscles of both extremities. As nothing is said about respiration we may, perhaps, be justified in concluding that it was performed normally; the assertion that the functions of the various internal organs did not seem to be essentially affected, would sustain that view. The respiratory muscles, then, did not lose their irritability, while all the voluntary muscles did; this seems not very probable.

2d. Why were all the nerves below a certain point involved, and none of those above that point? and why was not sensation more affected? It is not more likely that this would have occurred than that the muscular irritability should be lost.

3d. All the anterior roots must have been affected within six days; and within twelve hours the roots of the nerves supplying the toes and of those supplying the fingers must have been involved. In affections of the anterior roots, as in progressive muscular atrophy, certain muscles or sets of muscles are usually affected to the exclusion of others.

4th. There is no proof that the encephalon was affected; the intellect seemed unimpaired, and the disorder was confined below a certain height, and none of the cranial nerves were affected.

5th. A lesion of the cord explains the symptoms more satisfactorily than any other situation. The lesion need not have been extensive; a short tract of disorganization in the cervical region would explain the whole. The data are not sufficient to fix exactly the height at which the lesion must have occurred. The arm was affected; the neck and head were free, so that portion of the cord giving rise to the brachial plexus was involved; that portion whence the cervical plexus springs was mostly free. Probably the disease did not extend higher than the third or fourth cervical pair of nerves.

The upper limit may be determined; but it is not easy to fix the lower limit of the disease; a small perpendicular extent would be sufficient to account for the symptoms, and there is nothing to show that the whole extent of the cord was not affected. As on Thursday morning the toes were affected, and in the evening the third finger of the right hand, and on Friday the difficulty had reached the knees, it is, perhaps, more probable that a small extent was involved than that the whole cord should be affected simultaneously; yet there is no certain proof either way.

As to the situation of the lesion in the cord and its nature. Paralysis of motor fibres, with only slight affection of the sensory fibres, or the latter remaining wholly unaffected, is proved to be possible by the experiments of Brown-Séquard, and by many cases of disease. The toes being first affected, shows that either the lower part of the cord was first involved, or if the injury was in the cervical region, the fibres from the lower extremities were first the seat of the lesion, and soon after the fibres for the upper extremities were attacked. This is possible; for Brown-Séquard has shown that the fibres from the lower extremities occupy a deeper position relative to those from the upper extremities, which are more superficial. (See *Jour. de Physiologie*, v. 6, 1863, pp. 631 and 632.) As the different kinds of sensation were not tested, and as the æsthesiometer was not employed, it is not possible to say whether the lesion extended to other than the motor tract; but as there were subjective sensations of heat and cold, we may conclude that at least those fibres which convey the impression of temperature were subject to irritation.

The nature of the affection is more difficult to determine. According to Brown-Séquard, hæmorrhage is most frequent into the gray portion of the cord, and is accompanied with severe pain and loss of sensation. Dr. C. B. Radcliffe, in Reynolds's System of Medicine, mentions the same symptoms as attending hæmorrhage into or around the cord. According to the cases mentioned by Duchenne, there may be no lesion which can be recognized with the unaided eye. There may be derangement of the circulation or atrophy of the nerve fibres from over-use.

Pain was not present on pressure over the vertebral column. Tenderness on pressure is usually absent in diseases of the cord itself, and not often present in disease of the membranes. It is most frequently present in diseases of the vertebræ, and in cases of a neuralgic or hysterical character.

By supposing lesion of the cord as above, the continuance of respiration is fully explained, for the respiratory nerves take their rise above the seat of injury. There is no mention made of the state of the circulation.

This last condition seems to have the preponderance of evidence in its favor, and is entirely explanatory of the symptoms as given.

The value of the case would have been increased if the condition of the pupils had been noticed, and the temperature of the head and of the extremities had been taken with a thermometer; and if the different kinds of sensibility had been noticed, as well as the condition of reflex action, of electro-muscular sensibility, electro-cutaneous sensibility, and of the muscular sense.

The features of an affection similar to the one under consideration were sketched by Duchenne in 1853, and in his last edition of Electrisation Localisée he gives a fuller account under the name of "General Spinal Paralysis." He gives three cases. In the first, there was loss of motor power and atrophy. Nothing is said with regard to sensation. No lesion was found in brain or cord. In the second, there was loss of motor power, subjective sensations of pain, rapid emaciation, but preservation of cutaneous sensibility. There was softening of the anterior part of the cervical portion of the cord. These two cases occurred in 1847 and 1848, when the means of examining the cord were not so perfect as at present. The third case occurred in 1853; there was paralysis of motion and some diminution of sensation. Atrophy is not mentioned. No lesion of nervous centres was found.

The cases to which reference was made above, are given by Dr. Russel in the *Med. Times and Gazette*, Oct. 31, 1863, p. 457. He mentions the analogy between syncope from nervous exhaustion of the central ganglia or medulla and paralysis from exhaustion of the cord, and then says:—

"Although in syncope the cerebrum, medulla oblongata and spinal cord are all of them involved, though not to an equal extent, there are cases in which a depressing influence may operate upon the cord alone without ever travelling upwards to the brain, and produce a condition of exhaustion in the cord, in which the brain either does not participate, or participates only as a secondary phenomenon. . . . Among such causes the most direct and powerful are those which act through the instrumentality of the functions of the cord, exhausting it by making a demand upon it for excessive functional activity." He considers that none have greater power than sexual excess and masturbation.

He gives the account of five cases, only two of which resemble Dr. Butler's. An abstract is as much as is necessary.

Case II.—Robert B., æt. 25, had not incurred excessive labor, either of body or mind; his general health was good; he had been married six months. While away from home, he had two slight attacks of what he called "faintness." After returning home, on the fourth day, while walking, his legs failed him. The next day he tried a short walk, but soon became disabled. When seen by Dr. Russel, he could hardly stand, and his feet were scarcely raised from the ground in walking. His arms were unaffected. There were none of the symptoms of ordinary fainting. His hands were chilly; pulse was regular; heart sounds clear and distinct; respiration normal; no vertigo nor confusion of intellect; pupils natural; vision unimpaired; no abnormal sensations in legs, and having lain down he speedily regained full power over them, and was able to throw them about freely. During the next three days, he had two other attacks of like character, and each attack was related to some nervous effort, muscular or mental. The first three occurred during or after a walk; but in each case he had been engaged in mental exertion previously. Much less exertion of mind served to induce the subsequent ones—dictating a letter on one occasion, the receipt of a letter on another. The symptoms never exceeded the description already given. Micturition and defæcation were natural. Temperature, circulation and respiration normal. Repeated examination failed to discover any fault in the spinal column, or in any organ of the body.

He admitted emissions before marriage and occasionally since, and some excess in intercourse.

Case III.—There was excessive masturbation, and loss of both sensation and motion, and the patient continued to decline till death. Atrophy of the cord just above the lumbar enlargement was found, and oil globules existed in the walls of the vessels.

Case V.—Had practised masturbation and indulged too freely in sexual intercourse. His symptoms had commenced four years before he came under observation. He had at first abnormal sensations, tickling in the calves of his legs and between the shoulders; he felt weak, had vertigo and headache. His memory was impaired, and he had an attack of diarrhœa. Afterwards, he had aches and cramps in his limbs; his legs were cold at night; he was then working unusually hard, and exposed to cold and damp. Muscular power was impaired, and his legs dragged, and he thought sensation was diminished. Bowels were costive.

On admission to the hospital he was pale; giddy at times; sight was normal; bowels were costive; muscles of bladder and sphincter vesici weakened. He could not walk above thirty yards without resting. Sensation was perfect. He improved under treatment, but the result was not very satisfactory.

The treatment in the second case was "a horizontal posture, complete rest of mind, celibacy, generous diet, and tonics. As recovery took place, regulated exercise." In the fifth case, it consisted of "tonics and a generous diet, cod-liver oil, strychnine and phosphated oil. The lower extremities were stimulated by galvanism, and emissions were controlled by a bougie and cold hip baths."

The treatment was quite similar to that pursued by Dr. Butler. Of course it would be difficult to advise what method to follow without knowing all the circumstances in the case and the interest involved, but rest and relief from pastoral cares and anxieties would seem to be absolutely necessary. Could that be obtained at home? Would not familiar scenes and faces recall former responsibilities, and cause a continued anxiety lest there should be some neglect or loss? How would a sea voyage do? Of course, whether he returns to his professional duties cannot be answered yet; time will show how much improvement there is, and then an answer can be given.

S. G. Webber, M.D.

CASE OF ENCEPHALOID IN A CHILD.

By Geo E. Brickett, M.D., Augusta, Me.

G. N. D., male child, of healthy American parentage. At the age of 11 months, there was first noticed an enlargement of the abdomen, mostly on the left side. He had previously been healthy, but had whooping cough at the time. Abdomen continued to enlarge; appetite, digestion and action of bowels were not interfered with; he lost strength and became much emaciated, and was finally taken with dyspnœa, and died Nov. 2d, 1868, at the age of 14 months 16 days.

Autopsy, 6 hours after death. Emaciation marked. Much œdema of lower extremities. The abdomen only was examined. An incision being made in the median line, the colon was revealed lying over, and apparently attached to an immense tumor, which was found to lie between the layers of the meso-colon, having no attachments, except a few small bloodvessels. It was easily removed with the hand, after cutting through the investing peritoneum, and was of a globular shape; surface smooth and regular; weight seven pounds. On section, it presented the characteristic appearance of encephaloid. Softening had taken place in several circumscribed spots. No microscopical examination. All the abdominal organs normal. No case of cancer in family history.

Hospital Reports.

MASS. CHAR. EAR AND EYE INFIRMARY.

Some Cases in the Service of Dr. B. Joy Jeffries.

March 7, 1867.—A piano-forte player by profession, æt. 23, has distichiasis of all four lids. No operation had been done but evulsion of lashes, and last year and a half astringent collyria. Has suffered for years, and although vision is much reduced, the corneæ seem tolerably clear. On all four lids the position and direction of the ciliæ would seem almost to preclude other than a *double* growth. The lower lid was scalped, and Arlt's operation done on the upper lid, and, March 16th, the same on the other, the left eye. April 6th, discharged, *well,* with vision already improved enough to play the piano at night.

Arlt's operation consists in splitting the lid, and taking out an oval piece of skin above, and then sliding up the portion containing the lashes, thereby retaining them and yet preventing their rubbing on the cornea, the source of all the trouble. When this is not possible, scalping or removing only that portion of lid containing the ciliæ, are the operations indicated in these cases, and which, were they more generally understood and oftener done, would save many an eye from total blindness.

April 17, 1867.—A granite worker, æt. 42, has been struck by pieces of stone, which were all removed from the eye, and he worked on for two days in the sun, when pain commenced, and is now so severe that atropine, opium collyria, and subcutaneous injection of morphine are used, notwithstanding which pus appeared in the anterior chamber within a week, and gradually half filled it. The character of the corneal wound showed that no foreign body was probably in the globe. This *bruise* of cornea now sloughed, and the pus from globe flowed through it, after which the inflammation all gradually subsided, leaving a staphyloma at the corneal slough. Patient was discharged May 23d, well enough to work. Enucleation or abscission was not performed, because not called for by sympathetic trouble, and contraindicated by the severe general inflammation. The former would, of course, have immediately relieved the pain, but no foreign body seemed to have passed into the globe, as was proved by the patient appearing seven months afterwards, with the eye quiet and vision sufficient to "*bother the other eye.*" There is corneal opacity where slough took place, and anterior synechia. Iridectomy is advised, to obtain better binocular vision.

April 23, 1867.—A servant girl, æt. 23, ten days ago struck her left eye with a broom-handle, which burst sclerotic, up and in, and displaced lens into the wound. There was some bulging at the wound, which had healed. The opaque lens covered two thirds of pupil. Vision reduced to perception of light. Pain severe and constant. Photophobia and lachrymation of the other eye from sympathetic irritation. May 2d, patient assented to enucleation of globe, when conjunctiva was found, over ciliary region, fastened down by inflammation to sclerotic. Upon section of the optic nerve, there was a gush of blood, which continued to well up very profusely; it also infiltrated the lids, and, finally, when these were swollen to half the size of the fist, they closed the orbital cavity and stopped the hæmorrhage. It was ten days before this blood drained off and was absorbed. During this time the patient was weak and excited, giving cause to fear some cerebral irritation from the enucleation or the pressure from the blood. Knowing that enucleation was sometimes followed by cerebral disturbance, which passes off without danger, this large extravasation of blood was allowed to become absorbed, which it did, and the patient was discharged, June 13th, *much improved.*

The patient was an over-worked, anæmic woman, quite lame, *probably* from old hip trouble. She was seen, more than a year afterwards, wearing a false eye. Her general condition was poor, and she looked decidedly phthisical. I thought the bleeding came from some distended vein. The globe was examined an hour after removal, and the vitreous found clear, except some bloody streaks. The lens, opaque and breaking up, dislocated into the wound of the sclerotic, where the staphyloma was. Sclerotic, over ciliary region, intensely injected. Cornea clear. Pupil irregular. Had there been good vision, removal of the lens might have taken the place of enucleation.

May 9, 1867.—A healthy farmer, æt. 70, is, under ether, operated on for cataract in right eye. Flap operation downwards, with iridectomy. Nucleus removed with scoop. Not much subsequent trouble, yet vision came up only to counting fingers. One year afterwards, patient returned, and the iris was found to be stretched over towards the wound. A small iridectomy knife was passed in, and a piece of the iris removed with forceps. The iris was tough. Two weeks later, a stop needle was introduced and capsule divided, which brought vision up to reading Jäger 16 at four inches, and patient could go about. Six days subsequent, Graefe's operation was done on left eye, under ether, which, although full and continued, did not prevent contraction of orbicularis when the eye was touched. June 8th, vision of this eye was $\frac{1}{5}$ with $+\frac{1}{4}$, and reads Jäger 6 with $+2\frac{1}{2}$ at six inches. Six months later, patient reading with this eye.

Although myself more familiar with the flap operation at that time, yet so far as could be judged Graefe's operation did better. The chances were not so much in its favor so far as the operator was concerned, and therefore I introduce the case here.

May 11, 1867.—An Irish domestic, æt. 32, has staphyloma of cornea of left eye, result of purulent ophthalmia. Iridectomy previously on right eye. Constant pain in this left eye led to enucleation, and, on examination, posterior portion of globe appeared healthy. Lens opaque, swollen, and reaching to ciliary processes. Iris degenerated, soft, and against the cornea. Choroid separated from sclerotic rather too easily. Whole globe too soft. The large staphyloma consisted of firm, whitish, corneal tissue. The great pain could only be accounted for by the pressure of the lens on the ciliary processes and nerves.

April 30th, 1867.—A factory girl, æt. 13, has staphyloma at junction of sclerotic and cornea, up and in, of left eye. This has appeared within three weeks, and no traumatic cause. Comes on account of pain, which being relieved, patient returns home, and presents herself again in two weeks for enucleation. Vision in the other eye perfect. May 18th, eye enucleated. Choroid found a little pale. Vitreous firm. Retina in place. Lymph on ciliary processes. Sclerotic thin and soft over the staphyloma. Cornea was opaque, and peeled off from a mass filling anterior chamber, and pressing up into the staphyloma. This was found to be a sarcomatous growth, with some fibrous tissue. Nuclei very abundant, and more so with acetic acid. They were small, and some contained nucleoli. A few fusiform cells were seen. Patient discharged, *well*, May 27th, 1867, and not since seen.

Oct. 2, 1867.—An old fisherman, æt. 66, has tumor as large as a walnut growing on left eye, occupying inner side and covering over, but not attached to, three fourths of the cornea. Vision of the other eye good; no pain, only discomfort from this one. A piece under microscope gave undecided character, and patient was told the whole globe might have to be removed. Oct. 4th, 1867, wire ecraseur passed round, and two thirds of tumor removed; rest dissected off. It was apparently attached to conjunctiva and internal rectus mucle. Next day, no pain; motion good, and vision almost equal to the other eye. The tumor was only slightly attached to the cornea; it had a hard, gritty cut, and under microscope exhibited large cells of not a positive character. Some six months later, it had not returned. Patient at work, dory fishing.

Oct. 9, 1867.—Laborer, æt. 37, with double cataract; has left removed by flap upwards, with iridectomy. Cornea thin; iris weak. Oct. 31st, reads Jäger 17 with $+\frac{1}{3}$. Vision at distance, $\frac{1}{5}$ at twenty feet, and $\frac{1}{4}$ at seventeen feet with $+\frac{1}{4}$. March 19th, 1868, a hole was torn through the opaque capsule with stop needle and hook. This brought up vision to $\frac{1}{2}$ with $+\frac{1}{4}$ at twenty feet, and reading Jäger 7 with $+\frac{1}{3}$ at seven inches. General vision so good that patient did not care to have the other eye operated on. Graefe's operation will be done on this.

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

CHARLES D. HOMANS, M.D., SECRETARY.

Oct. 26th.—*Malignant Pustule and Bacteridiæ.*—Dr. Hodges exhibited, under the microscope, specimens of bacteridiæ from a malignant pustule. He said that he supposed few diseases were of more rare occurrence in this community than malignant pustule. By this term he did not refer to that malignant form of anthrax or furuncle, affecting especially the upper lip, of comparatively frequent occurrence, and very often rapidly fatal, which was sometimes misnamed malignant pustule. By malignant pustule he meant a specific affection, never occurring spontaneously, but always the result of an inoculation of a specific virus, derived more or less directly from animals, usually those of a herbivorous nature.

Its appearance is characterized by the apparition on the skin of a serous vesicle, *non-purulent*, umbilicated, which becomes quickly converted into an eschar, surrounded by a ring of vesicles and resting on an indolent base, œdematous, more or less hard, elastic and extensive. The eschar is rarely more than a quarter of an inch in diameter. Little or no pain accompanies the local affection, and the indurated and œdematous parts are but slightly tender on pressure.

It was obvious that a disease which is thus described must be entirely distinct from the red, conical tumor, developed in the cellular tissue, throbbing, intensely painful, with no areola of vesicles, allowing the escape of pus on pressure, and which had been already alluded to as having sometimes received the name of malignant pustule. A tumor five centimetres in diameter (about one and three quarter inches), it is asserted by the physicians of la Beauce can never be a malignant pustule. A furuncle or anthrax of the lip not unfrequently attains this size. The striking features of malignant pustule, as it had been seen by Dr. Hodges, were, the insignificance of the pustule itself, which resembles more than anything a vaccination vesicle on the eighth or ninth day when its centre is becoming dry and brown; and the extensive œdema and swelling, entirely disproportionate in amount to the local affection by which it is provoked.

In a paper read before the Norfolk District Medical Society, and published in the Boston Medical and Surgical Journal for Feb. 13, 1868, Dr. S. E. Stone, of Walpole, had reported eight cases of true malignant pustule. One of those cases Dr. Hodges had seen; and recently a second in the practice of the same gentleman. The diagnosis was unmistakeable, and all the cases (with a single exception where the patient was the wife of a workman) occurred in the persons of workmen, women or children engaged in the manufacture of curled hair. The pustules had appeared at intervals, usually more than one at a time, during a period of fourteen months. In connection with this subject Dr. Hodges called attention to the following statements.

In July, 1863, M. Ch. Davaine, a well-known French author and observer, presented a paper to the Academy of Sciences, in which he asserted, as the result of original investigations by himself, that the disease known as malignant pustule is never transmitted except through the agency of what he names bacteridiæ, a kind of vibrio found in the lymph of the vesicles or blood of the diseased animal or person. (Specimens of these bacteridiæ from the lymph of the pustule which Dr. Hodges had recently seen with Dr. Stone, were shown under the microscope.) They consist of straight, stiff, cylindrical, detached filaments varying in length from four to twelve-thousandths of a millimetre, and are extremely slender. The longest present occasionally one, and very rarely two, bends at an obtuse angle. By a high power traces of a division into segments may be detected. They are absolutely without spontaneous movements. On drying they preserve their form and appearance. Sulphuric acid and caustic potash have no distinctive effect upon them. When the blood is in a state of putrefaction the bacteridiæ disappear entirely. This fact, in the estimation of their discoverer, separates them from the whole category of infusoria which generate in putrefying matter, even if their development in blood which is, so to speak, living, and without any characteristic odor, is not a distinction.

The dependence of malignant pustule upon the presence of bacteridiæ is claimed to be shown by the results which follow their inoculation; viz., the successive and indefinite transmission of the pustule so long as the blood or lymph inoculated contains bacteridiæ; the resistance of dogs, birds, &c., who do not have malignant pustule, to the inoculation of, or development of, bacteridiæ in their blood, unless introduced in very large doses. These results have been confirmed by the experiments of the Medical Association of the *Eure et Loir*.

The experiments of M. Davaine also show that the bacteridiæ are developed during life, and never after death; that they are not transmissible from the mother to the fœtus in utero; that after being dead for eleven months they are capable of transmitting malignant pustule by inoculation; that blood from which bacteridiæ have disappeared by reason of its decomposition is incapable of propagating the infusoria when introduced in the small quantity sufficient to transmit them from fresh blood; that when larger quantities are introduced the phenomena provoked by the inoculation of putrid matter into the economy may be developed, but no infusoria appear in the blood even though the animal dies.

Dr. Hodges said that he cited these points merely to show the grounds upon which the assertions of M. Davaine rested. His views are generally accepted in France, especially in those parts where malignant pustule prevails.

Although the specimen showed did not display bacteridiæ in such abundance as in an illustration exhibited by Dr. Hodges, and contained in an article by M. Raimbert (*Nouveau Dictionnaire de Medecine et de Chirurgie*, Vol. 7, article "Charbon"), they were in numbers sufficient to identify them, and Dr. Jeffries Wyman, who had seen the specimen, considered them as undoubtedly the form of infusoria described by Davaine. In view of his own investigations and the omnipresent growth of low forms of vegetable life, Dr. Wyman, however, was not inclined to attach to them the specific importance claimed by Davaine, and thought there was nothing either in their form or absence of motion to distinguish them from vibrionides found under a great variety of circumstances.

Although the lymph from the vesicles around the pustule in question contained bacteridiæ in abundance, Dr. Hodges said that in the blood of the patient they were few in number, unless the numerous granules, present under the microscope after treating the dried blood with caustic potash, were the broken up segments said to be found when the blood has begun to putrefy. Perhaps it would be more natural to suppose that they were present in the circulating fluid in small numbers, because the intensity of the poison in the case in question was of a comparatively feeble degree. Although on the third day from the appearance of the pustule, the swelling of the patient's neck, on the side of which it was situated, was so great that the act of swallowing was performed with difficulty and fluids regurgitated through the nose, while the pulse was 130 and compressible, and there was every reason to think that the patient would shortly die, she had, nevertheless, recovered. The fact that certain animals, refractory to the poison in the usual dose, succumb to an increased one, would seem to show that in man the virus might be introduced in varying amounts, and, if its essence rests in these bacteridiæ, the number in which they are present should vary also, and naturally be less in a case not proving fatal. Dr. Hodges had thought the microscope specimen of sufficient rarity to interest the society, whatever might be the merits of the observations of M. Davaine. If these were reliable an invaluable method of diagnosis was furnished in cases of doubtful character and in localities where malignant pustule is of rare occurrence. They also suggest important indications for treatment. In the south of France great reliance is placed on excision and cauterization before the second or third day, after which period the disease begins to affect the general system, and is usually beyond the resources of medical skill. The anatomical formation of the pustule explains perfectly the succession of these phenomena. The bacteridiæ are first developed in the epidermic layer of the skin, which contains no vessels, consequently they are isolated from the rest of the economy, and their destruction ought to arrest their further propagation. If they are not destroyed they presently reach the superficial layers of the true skin, which are abundantly provided with bloodvessels and lymphatics; through these they are introduced into and carried along by the circulating fluid and infect the rest of the system.

Dr. Hodges further remarked that in an article by M. Debrou (*Arch. Gén. de Med.*, Oct., 1865), the writer asserts that, in both malignant œdema and malignant pustule, the mucous membrane of the stomach and the small intestine present a lesion after death which appears in the form of brown, elevated patches, due to the extravasation of the blood, but that it is not known at what period of the disease these extravasations occur, or whether in spite of them recovery may ensue. They cannot however be found in all cases, and death may take place without their presence. M. Debrou draws attention to the similarity in the effects of malignant pustule and the bite of the viper, in fatal cases of which the blood liquefies and extravasates. From this he argues that a specific poison (which he believes to be the bacteridiæ) is introduced in malignant pustule, and by inference, from the successful treatment of viper bites, draws the conclusion that the virus is capable of being arrested in its effects, at an early period, by suction, excision or cauterization.

Dr. Hodges said that the patient whose case had suggested his remarks had recovered without local treatment. Cauterization was advised, but the patient would not consent to its application. A supporting diet, and a general treatment with quinine, morphia and stimulants, had been energetically enforced by Dr. Stone.

Bibliographical Notices.

The Materia Medica in its Scientific Relations. Hartford, Ct. 1868.

This is a pamphlet of about forty pages, the chief object of which appears to be to induce the profession, and others who may be competent to the task, to do what they can to elevate the science of materia medica to a more worthy position than it now holds. The author shows that the language used in leading works on this subject is generally extremely vague; or, when more precise, is apt to be conflicting. He then draws a parallel between this and other sciences in which (e. g., in astronomy) no such vagueness or contradiction would be tolerated. He freely acknowledges the necessary want of exactness in the science of materia medica, but still thinks there is room for the greatest improvement. He thinks that the action of each drug should be studied separately, first in health and next in disease; and maintains that, if observers would cease to accept as conclusions what are merely probabilities, and would separate in their minds and in their writings the simple action of drugs from therapeutical indications, we should have no such statement in one leading work as, that mercury causes an increased flow of bile, and in another that this drug acts in precisely the opposite direction.

Undoubtedly there is much truth in what is said in this pamphlet, but it must not be forgotten that physicians have not the opportunity, even if they had the time and ability, to experiment *ad libitum* with the articles of the materia medica both on healthy and diseased *human beings* (for animals would not answer the purpose) for the *sole* object of increasing the exactness of the science. And this remark appears to us to have the more weight, when it is remembered that *the* thing to be borne in mind by the student of materia medica is, *not* how many drugs may be *given*, but how many may be entirely *dispensed with*, to the great benefit of the patient. F. C. R.

The Opium Habit, with Suggestions as to the Remedy. 8vo. Pp. 335. New York: Harper & Brothers. 1868.

This volume compiles the sad experience of Coleridge, De Quincey and other less-known opium eaters, and proposes a plan of cure for them. In the history of all such unfortunates, two points are especially noteworthy: — 1st. That the physician's prescription of opium for pain is the most frequent starting point of the pernicious habit; 2d. That while restrictive and prohibitory laws are enforced, as regards alcohol, at those very times is the market consumption of opium the largest.

That this was the case in Massachusetts, we learn from one of our largest drug dealers.

The autobiography of opium eaters is always of varying interest, according to the originality and talent of the victim. To this rule the present volume is not an exception.

The mode of cure proposed at Ford Island, New York, combines the use of other narcotics, and of daily diminishing doses of opium—for a *sudden abandonment* of the drug is not advocated—with the Russian bath, the condensed air-chamber, and the use of galvanism, of tonics, exercise and food. We commend the volume to all interested in such a subject—and their name is legion.

Medical and Surgical Journal.

BOSTON: THURSDAY, JANUARY 7, 1869.

BOSTON CITY HOSPITAL.

FROM the forthcoming Annual Report of the City Hospital, we make the following brief abstract, covering points of especial interest to the profession.

This is the fifth year of the Hospital's existence; and the natural growth of a new institution, as well as the annexation of Roxbury, have increased its numbers *thirty-three* per cent. in its various departments.

Thus, the whole number of patients treated in the Hospital in 1867, was 1534

But in 1868 it was 2078

Of these, the medical department increased from 670 to 1133

The surgical department from 687 to 880

The smallpox decreased from 74 to 4 cases.

The number of medical *out*-patients was 3851

The number of surgical *out*-patients was 2732

The number of ophthalmic *out*-patients was 1108

Making a total of 7691 persons who came to the Hospital from day to day, and received advice and treatment gratuitously, but without remaining in the institution.

The total number of sick treated at the Hospital, in all departments, was 9769

The newly constituted department for cutaneous diseases treated, in *seven* months, 500 patients.

Of the 7691 persons who came to the Hospital as *out*-patients, in 1868, the average expense to the city was as follows:—

For each medical patient,	35 cents.
For each surgical patient,	10 cents.
For each ophthalmic patient,	02 cents.

Four hundred and twenty-one (421) accidents were admitted during the year.

In 1867, the number was 328.

Of these accidents, 214 were fractures.

A few were the rarer injuries, such as:—A dislocation of the os innominatum at the sacro-iliac synchondrosis; three dislocations of the clavicle; one of the vertebræ; two fractures of the upper jaw, and one of the scapula.

There were 18 fractures of the skull; 36 fractures of the thigh; and 67 fractures of the leg. There were, also, seven cases of gun-shot wound, and five punctured wounds of the abdomen.

Three hundred and fifty-three (353) surgical operations were performed on patients in the Hospital, against 289 last year. The operations on out-patients numbered 317, and on the ophthalmic out-patients, 84; making a total of 754 operations.

It is noticeable, also, that this increase is not wholly of operations for traumatic cause; but that pathological surgery is beginning to seek the Hospital, the number of tumors being 50, against 16 in 1867.

But the most gratifying fact of all is, that while the number of patients treated inside the Hospital has increased thirty-three per cent., the mortality has *decreased* over one per cent.

The rate of mortality is as follows:—

In 1865 - - -	$8\frac{4}{1}$ per cent.
In 1866 - - -	8 per cent.
In 1867 - - -	$8\frac{6}{10}$ per cent.
In 1868 - - -	$7\frac{3}{10}$ per cent.

But one death occurred from pyæmia, and six only from erysipelas.

On the whole, the Hospital is showing a steady growth, both in the number, the gravity and the results of its cases. Such an increase, coupled with the rapid growth of Boston, will soon require more room to accommodate the sick.

THE AUSCULTATION OF THE ŒSOPHAGUS AS A DIAGNOSTIC MEANS IN ITS DISEASES. By Dr. W. HAMBURGER, Bohemia.—The author refers to the obscurity of the diagnosis of œsophageal affections, which he likens to the condition of diagnosis of thoracic diseases previous to the introduction of physical exploration. The diseases of the œsophagus are so barren of symptoms, our present means for their diagnosis are so insufficient, that the necessity of augmenting these resources is obvious. The sensibility of the œsophagus, excepting its most superior portion, is very small; it is supplied with few sensory nerves and few vessels. It is clear that its abnormities must produce but few external evidences. There are really but *two* symptoms likely to betray the presence of œsophageal diseases: viz., pain and dysphagia.—*i. e.*, altered sensibility or altered function; and even these are little calculated to give much information. Pain is not often present in disease of the œsophagus; even cancer is here frequently painless. The seat of pain, moreover, it is mostly impossible to state with accuracy. And, on the other hand, pain and abnormal sensations are often referred to the gullet, when the latter is perfectly normal. Difficulty of swallowing is not any more reliable as a diagnostic symptom. Above all, it must be remembered, that in nine cases out of ten, this phenomenon is not a symptom of affections of the œsophagus, but of other more or less distant organs. Of these may be mentioned inflammations of the tonsils, nutritive lesions of the thyroid, retropharyngeal abscess, aneurisms of the aorta, pericardial exudations and cardiac hypertrophy, tubercular infiltrations about the bifurcation of the trachea, &c. Cancer of the lungs and pleura often cause dysphagia. The same symptom is caused by alterations in the nerve centres, by specific irritants of the nervous system (*e. g.*, the hydrophobic virus), &c. On the other hand, in some organic affections, as dilatation, of the œsophagus, dysphagia may be entirely absent.

The only means left, then, when these symptoms prove unreliable, for exploration of the œsophagus, is the œsophageal sound. This the author calls, not a two-edged, but a many-edged sword; it is capable of doing great mischief, while it is insufficient in many affections, and in others capable of leading into error. Nevertheless, the author concedes that the instrument is indispensable; but it is only by means of auscultation that it is robbed of its dangers and made available for diagnostic and therapeutic purposes.

Every solid or fluid morsel in being swallowed produces a certain sound (noise, murmur—*Gerausch*), which may be detected by applying the stethoscope or ear close upon the denuded body. The cervical portion of the œsophagus is examined on the left side of the neck, the thoracic portion to the left of the vertebral column, while the patient is directed to swallow a spoonful of water; the latter is preferable to solid morsels for purposes of experiment; the quantity must amount to at least a tablespoonful to make the noise produced sufficiently distinct. The œsophagus should be auscultated in its entire length, from the level of the hyoid bone to opposite the 8th dorsal vertebra. By a little practice it is easy to become so familiar with what is perceptible by the senses in the act of deglutition, that deviations from the normal are easily detected.

In health.—I. Applying the stethoscope near the hyoid bone in health (auscultation of the pharynx), a loud sounding gurgle is heard, with the sensation as if the mouthful of water was forcibly thrown into the ear of the observer. This sound is produced by the sudden compression of air and water in the pharyngeal space—hence its metallic ring and sonorous character. It becomes less audible and fainter, the farther down the neck we apply the stethoscope.

II. In auscultating the œsophagus from the level of the cricoid cartilage to the 8th dorsal vertebra, we may hear during deglutition how a small, but firm spindle-shaped body is firmly enclosed by the œosphagus and rapidly pushed downward with a sound. The author explains: (1.) The morsel (meaning the quantity of water propelled by a single act of swallowing) is compressed by the circular contraction of the œsophagus into one compact body. The ear receives the distinct impression of a spindle shape—an impression which is perfectly distinct and indubitable, though the author cannot explain *how* it is produced. It is of importance, because deviations are observed in some diseases. (2.) The ear distinctly perceives the circular contraction of the œsophagus. Ordinarily the energy of this contraction is not very marked, but increases whenever there is an impediment to the downward passage of the morsel. (3.) The sound which is distinctly perceived during deglutition is that of a smooth slipping, though sometimes a glugging. Deviations in disease are easily recognized. (4.) The act of swallowing takes place with a certain rapidity—in a very short, but still measurable, space of time. (5.) The auscultator distinctly perceives that the morsel is carried perpendicularly downward. Hence attention to the following points is required: the *sound* accompanying deglutition, the *shape* of the morsel, the *energy* of the contraction, the *rapidity* with which deglutition is effected, and the *direction* in which the morsel is propelled.

In disease.—The deviations from the normal in cases of disease are the following:

1. As to the *sound:* the *entire absence* of the sound is frequent, and denotes serious abnormities. If the sound is heard down to a certain spot, while it is suddenly absent below, we can safely conclude the existence of one of the following lesions: rupture of the œsophagus, foreign body, possibly a dilatation (*Divertikel*), or most frequently stricture. At the same time we learn the seat of the lesion. A *rubbing* sound is sometimes heard along with the normal slipping sound, similar to pleuritic friction sound, but fainter. This is produced by croupous or diphtheritic processes in the course of typhoid, puerperal, and exanthematic diseases, by fibroid or polypous excrescences, by pustular eruptions in the œsophagus (confluent variola), by large ulcers with detached lower margin, in spasmodic dysphagia. A slightly whistling or *hissing* sound was observed by the author in a case of rupture. A *rustling* sound is sometimes perceived in pseudo-membranous processes, and ceases after vomiting. The slipping or glugging murmur may be accompanied by a *metallic* sound in case of pneumothorax of the left side. A *sputtering* and *running* noise replaces the normal sound in cases of considerable dilatation and relaxation of the tube, in callous strictures when the muscular fibres are compressed or atrophied, in paralysis, and in all those protracted catarrhs accompanying ulcerations and new-formations, which cause relaxation of the muscular coat by serous imbibition. *Sonorous regurgitation* takes place in cases of recent stricture, especially those of a spasmodic character, occurring in paroxysms, and known as "œsophagism." It may be as loud as is normally heard in auscultation of the pharynx. A *scratching* sound may be artificially produced by the œsophageal probe, and, heard by the stethoscope, is of great importance in determining the exact spot of the abnormity.

2. Deviations in the *shape* of the morsel always take place when the contraction of the tube is wanting or without energy, as well as wherever the configuration of the œsophagus has suffered a change.

3. The *energy* of the muscular contraction may be increased or diminished. The former takes place wherever deglutition is impeded; the ear perceives a forcible contraction in that portion situated just above the the seat of the impediment. Increased energy of contraction sometimes gives the ear the sensation of a *jerk* or *blow,* when the morsel arrives at a certain spot. This symptom is a valuable diagnostic mark, pointing with certainty to an ulceration, erosion, a pricking body, or an otherwise inflamed spot, though it is extremely difficult to find its exact position.

Diminution of the contractile energy takes place wherever the muscular coat is degenerated in structure, or has otherwise lost its contractility and elasticity.

4. The *rapidity* of deglutition is never increased; it is diminished in almost all cases of œsophageal disease.

5. Deviation of the *direction* of the morsel to one side is rare; it occurs when by lesions of neighboring organs the œsophagus itself is turned aside, as was observed in a case of scirrhus of the thyroid. More frequently the direction is reversed: *regurgitation*—which may be complete, and either immediate (recent strictures, foreign bodies, tender ulcers, œsophagism), or after some delay (in cases of longer standing). This, even when delayed, is accomplished without vomiting, *i. e.*, without the co-operation of the abdominal muscles. Or the regurgitation may be incomplete, the morsel rising only a short distance in the canal, and then resuming its downward passage. This is distinctly heard. The author observed it in cases of small excrescences, slight callosities, obstruction by tuberculous bronchial glands, and incipient stenoses.

Regurgitation is sometimes accompanied by a loud noise; *sonorous regurgitation.* This has been noticed in stenosis of the cardiac orifice of the stomach, opposite the 7th and 8th dorsal vertebræ.

A necessary caution is to choose the time for auscultation when the œsophagus is empty. When it is filled auscultation is not practicable, except in reference to incomplete regurgitation.

In another chapter the author adduces clinical examples, and in an appendix treats especially of the diagnosis of strictures.—*Med. Jahrbücher.—St. Louis M. & S. Jour.*

Dejections of Infants associated with forms of Disease.—Dr. A. Monti has published quite a lengthy article "on the Changes in the Dejections of Infants, and their association with certain forms of disease" (*Jahrbuch für Kinderheilkunde,* 1868, I. 3.), of which the following are the conclusions: (A.) The decrease of the milk-detritus is proportional to the severity of the disease. An increase of the same points to an abatement of the disease. (B.) The changes of color of the dejections are of importance with regard to the prognosis; stools partly yellow and partly green, if they continue for a few days, usually accompany the milder forms of enteric fever; but if the same are of a green color from the commencement, they give evidence of an enteritis of long duration and severe character. If, during the second week of the attack, yellow dejections alternate with green ones, this change is to be looked upon as a favorable one; but if pus or blood appears with the same, the prognosis becomes unfavorable. (C.) The cadaverous odor diminishes with the decrease of the disease. (D.) The continued increase of water in the stools belongs to the most unfavorable appearances, inasmuch as experience has shown it to be followed by a collapse. The quantity of mucus is a criterion for the estimation of the severity of the disease. A diminution of the same shows decrease of the disease. (F.) The presence of a small quantity of blood is not an especially unfavorable appearance; but larger quantities or the frequent appearance of blood in the stools, is to be considered a very unfavorable symptom, as such cases are of very long duration, and mostly end fatally. (G.) Larger quantities of pus are peculiar to enteritis of long duration. The dejections in *cholera infantum* are commonly extraordinarily frequent and profuse, except in isolated cases in weak or artificially fed children, in whom the stools are occasionally not augmented. The dejections are fluid, flaky or crummy, of a rice-water or light yellowish-green color, of a slightly sour, or, in isolated cases, ammoniacal odor; in slight cases they react feebly sour, in severe cases the reaction is neutral. Milk-detritus and fats are diminished in the highest degree, as is the coloring matter, but the amount of water is considerably increased.

The following points are of importance in the estimation of the disease: (A.) The appearance of milk-detritus points to the commencement of convalescence. (B.) The diminution of the coloring matter, as well as the increase of watery constituents, are proportional to the severity of the attack. From the above it follows, in general, that in all cases the diminution of the coloring matter, the increase of mucus and water, and the appearance of blood and pus, are to be considered as unfavorable symptoms.—*Allgemeine Med. Central Zeitung.*

Diseases of Farm Stock.—The prevalence of fatal maladies among all varieties of farm animals, resulting in the annual loss of not less than $50,000,000, demands the prompt attention of this Department, the vigilance of the agricultural associations, and national and State legislation. The past year has not been one of peculiar misfortune in this respect, except in the dissemination of the splenic fever, communicated by Texas cattle; yet horses, mules, sheep and swine have all suffered from the local prevalence of malignant forms of disease, against which little veterinary skill is opposed, and little more than empiricism and superstitious folly is practised. A disease may suddenly decimate the cattle or horses of a neighborhood, the only popular knowledge of which is the statement that it is a murrain or distemper. A disease exists locally in several of the Southern States, by which the total loss of a plantation's stock of horses and mules not unfrequently occurs, with scarcely an effort or hope for a cure. The annual loss in swine cannot be less than $10,000,000 or $15,000,000 by the disease commonly known as "hog cholera," for which no remedy has been found; and prevention has proved difficult and uncertain.

On the breaking out of the splenic fever at the halting places of Texas cattle during the past summer, I commissioned Professor John Gamgee, of the Albert Veterinary College of London, to investigate its character, causes, and the means for its prevention. The labor was undertaken at once, and continued with zeal and activity in several Western States, including the Texas cattle stations of Western Kansas. *Post-mortem* examinations, not only of diseased native stock, but of the cattle from Texas, were repeatedly made, and their results carefully recorded, all tending to connect the migrating herds of the Gulf coast unmistakably with the existence and spread of the disease. The report of this investigation, enriched with valuable material collected by the statistical division of this Department for a history of the outbreak, will be presented to Congress at an early day, together with a statement of the previous history of this disease in this country, and chromo-lithographs of the internal organs of animals dying from the disease. The Department has been cramped for means to conduct this investigation, having no fund from which to defray its expenses, except that for statistical purposes, which is quite too meagre for the absolutely indispensable demands upon it, and congressional aid will therefore be requisite for the completion of the work undertaken and for the proper publication of the report upon it.

While it is deemed important to investigate the cattle diseases prevalent, and to obtain the best professional aid in seeking to diminish the extent of their ravages, it is evident that effort directed towards the cure of any disease which is well developed in any section of the country must be very unsatisfactory and ineffectual. Many of the diseases of cattle, as of men, have their origin and distribution in the unnatural and unhealthy conditions of their growth and management, naturally resulting from what is termed our civilization. These diseases belong to the class of ailments which are preventible. Their causes are known, and means of prevention are at our disposal; and if an enlightened state of public opinion leads to the formation of societies for the prevention of cruelty to animals, a higher appreciation of the dependence of domestic animals upon us, not only for food but for care and protection from disease, should lead to the formation of establishments for the study of cattle in health and disease, and the training of a class of practitioners who would bring the highest medical skill to the treatment of our domestic animals. If motives of humanity should fail to influence, self-interest, in view of the annual losses of millions of dollars in valuable property, should be a potential inducement to prompt action in this direction. The formation of veterinary colleges—not for the treatment of animals, but for the education of a class of practitioners of skill and science, who might become beacons, warning the proprietors of stock of the approach of disease, and pointing out the means of prevention—has been adopted in many European states, from which much benefit to the community has been derived. I consider it eminently the duty of this Department not only to point out the want of such an institution, but to initiate its establishment; and I earnestly hope that Congress may authorize at an early day the creation of a division of veterinary surgery for the investigation and prevention of diseases of domestic animals, and for the advancement and diffusion of veterinary science and for its most efficient and beneficent practical operation.—*Annual Report of the U. S. Commissioner of Agriculture.*

Cinchona Planting.—Among the "new and valuable plants" which the organic law of the department requires it to propagate, cultivate, and distribute among agriculturists, there may be included not merely those useful as food stuffs, or for industrial arts and manufactures, but also those which subserve the sanitary interests of the people. European governments, possessing intertropical colonies, have already taken the lead in the introduction and acclimatization of medicinal plants within their own limits. I would especially call attention to the necessity which has arisen within the last few years for the initiation of prompt measures by the government to obviate the results of the extinction of the cinchona forests on the Andes, which is caused by the negligence of the governments of Peru, Ecuador, and more northern Andean states. The experiments of England, Holland, and other countries, have shown how readily new plantations of cinchona trees may be established in suitable localities, how rapidly the species becomes acclimated, and how early it yields satisfactory returns, and how easily such enterprises are popularized and rendered profitable. The supply of quinine has become a necessity of existence, not merely as a cure, but as a prophylactic agent. During the late war many thousand lives were saved by its use alone. In view of the approaching extinction of the cinchona species (unless intelligent governments introduce the cultivation within their own territories), I would earnestly recommend that an appropriation be made by Congress to introduce it, and to propagate and establish a cinchona plantation under the care of this Department.—*Ibid.*

Resignation of Prof. Perkins.—At a meeting of the Medical Department of the University of Vermont and State Agricultural College, the Dean having presented the resignation of Dr. Joseph Perkins, Prof. of Obstetrics and Diseases of Women and Children, and the same having been accepted, the following resolutions were unanimously adopted as an expression of the sentiments of the Faculty:

Resolved, That in accepting as we do, with profound regret, the resignation of our esteemed colleague and brother, Dr. Joseph Perkins, we desire to renew to him the expressions of our esteem for his long and successful career as an instructor, and the devotion he has ever exhibited to the best interests of our profession.

Resolved, That we gratefully acknowledge our indebtedness to him for the foundation and most valuable contributions to the Museum of this Department; a liberality which, beginning with the first day of our associated labors, has continued uninterruptedly until the last, and been actuated by the sincerest desire to advance the interests of this Institution and promote scientific medical instruction.

Resolved, That in parting with him under the necessities of age and impaired health, we tender him our kindest sympathies and best wishes for the prolongation of a life honored by such fruits of usefulness, praying that its sunset hours may be gladdened by the richest rewards of a Christian faith.

Resolved, That the name of our esteemed colleague be recommended to the Trustees of this Institution for an Emeritus Professorship of the same chair lately occupied by him.

COTTON PLANT AS AN EMMENAGOGUE.—Jos. Jones, M.D., Professor of Chemistry in the Medical Department of the University of Louisiana, in the *St. Louis Medical Reporter*, states:—It has been claimed, by a number of practitioners of medicine in the Southern States, that the root of the gossypium (*cotton plant*) possesses the power of stimulating the uterus, so as to cause abortion when administered to the pregnant female, or the return of the menses in cases of amenorrhœa. It has also been said to equal ergot, in its power of exciting uterine contractions during labor.

Dr. Bouchelle, of Mississippi, who believes it to be an excellent emmenagogue, and not inferior to ergot in promoting uterine contraction, states that it is habitually and effectually resorted to by the negroes of the South for producing abortion; and thinks that it acts in this way without injury to the general health. To assist labor, he employs a decoction made by boiling four ounces of the inner bark of the root in a quart of water to a pint, and gives a wineglassful every twenty or thirty minutes.

Dr. Ready, of Edgefield District, South Carolina, says that his attention was called to its emmenagogue properties by an article which appeared in a medical journal, published some years since. He has since used it in suppression of the menses, but more particularly in many cases of flooding, with entire success. Dr. Ready believed it to produce as active contractions of the uterus as ergot itself.

IODINE AND ACONITE IN PERIODONTITIS.—The best remedy, and the one that works the most conveniently, for periodontitis, I have ever used (and I have tried nearly everything recommended) is a mixture of equal parts of officinal tincture of iodine and tincture of aconite root, applied to the gum around the roots of the tooth with a camel's-hair brush, or a portion of cotton wound on the end of a stick of orange wood. I have been using it about a year, and, to my knowledge, it has never failed to relieve the patient. I apply it, in the early stages of inflammation, once in twenty-four hours; in very severe cases, twice. In my office practice, and in the infirmary, I have opportunity of observing its workings to quite an extent. There are advantages in its use over other remedies, which you will readily observe on trying it.—Prof. FRANK ABBOTT, in *Dental Cosmos*.

AMPUTATION OF THE UVULA.—With a view to prevent, in great measure, the painful sensation arising from the passage of a bolus of food across the raw stump of a previously elongated uvula, Mr. Maunder proposes to amputate this organ by the double flap method. These fall together, and their cut surfaces being in contact, no raw surface is exposed to irritation. He recently adopted this plan with a highly satisfactory result, introducing a small suture to maintain coaptation of the flaps.—*London Lancet*.

THE death rate of New York and Brooklyn is said to be 17 per 1000; of London 24; Dublin 22; Bristol 19; Liverpool 30; Vienna 26; Berlin 24.

Prof. Joseph Jones, recently of Nashville, has accepted the chair of chemistry in the Medical Department of the University of Louisiana.

Dr. S. P. Moore has been appointed Superintendent of the Eastern Lunatic Asylum at Williamsburgh, Va., in place of Dr. Arthur E. Petticolas, deceased.

Selections and Medical Items.

Case of Incised Wound of the Abdomen, with transverse Division of the Small Intestine in two places, and Division of the Mesenteric Artery. By James L. Ord, M.D., Santa Barbara.—October 7th, 1867. Was called to see B. O., a native Californian, aged thirty, who had received an incised wound in the left iliac region, over the spinous process of ilium. Arrived about two hours after he was wounded. Found the small intestines protruding enough to fill a hat, and cut in two places transversely, and a large branch of the superior mesenteric artery divided and bleeding profusely. The bowels were red and much congested; some of the fæces had exuded from the intestines. Tied the artery with white silk, and sewed up the intestines with common *sewing cotton*, and a fine needle; gradually reduced the bowel.

In tying the artery and sewing the gut, left about four inches of the thread, intending to leave the ends out, but in reducing the bowel they went in together. The external wound was partially closed by two sutures, leaving the lower part open, so as to let out the blood, &c., that might have collected in the cavity of the abdomen. There was considerable time occupied in reducing the bowels; as the opening was small, a little of either end was reduced at a time. No chloroform was used.

Gave Dover's powder, gr. xx.; there being considerable pain and tenderness of the abdomen.

Next day gave hydrarg. sub. mur. gr. xx; there still being much abdominal pain on breathing.

October 9th. — Saw the man to-day; doing well; pulse, 86; breathing, 36; not as much abdominal pain on breathing; gave hydrarg. and tart. antim. to check peritonitis, and act on the bowels; considerable sanious discharge from the wound; gave no food, except water and corn-meal gruel on the second day.

October 11th.—Had an operation from his bowels yesterday; little or no abdominal inflammation; appetite improving; ordered his diet to be increased; discharge from the wound still great; yesterday gave sulph. magnes. ℥ss., in divided doses.

October 15th.—Doing well, asked to get up; external wound smaller; discharge not so great; little or no tenderness on pressure of the abdomen, and no pain in breathing; at night complains of some pain, which disturbs his sleep; gave sulph. morph., gr. j., at night; requested the attendants to notice if any pieces of thread pass the bowels.

November 10th.—This man rode to town to-day on horseback, distance five miles, to report himself perfectly recovered. His attendants did not see anything of the pieces of the thread that were used in sewing up the wounds, and so I think they must have been absorbed.

October, 1868.—This man has since died (September, 1868) with phthisis; was not able to make a post mortem, being absent at the time of his death.—*California Med. Gazette.*

Medical Department of the Public Library.—In the Bates Hall, the departments relating to the different professions are remarkably full. The books in Theology and Ecclesiastical History already constitute a very choice collection, and most of the standard works on Medicine are added as fast as they come from the press. The best collection of books on Surgery and Medicine, to be found in the city, is here thrown freely open to the physicians and medical students of the community. During the last summer more than four hundred and fifty volumes on Physiology and its kindred sciences, from the library of Professor Brown-Séquard, were added by purchase.—*Sixteenth Annual Report of Boston Public Library.*

Pneumonia of the Apex of the Lung.—At the Hôpital St Eugénie (*Dominion Medical Journal*), cases of pneumonia of the apex have been noted by M. Barthez. Convulsions, which lasted from three to four days, marked the outset of the disease in two cases. The disease did not become apparent until the fifth day, and on the seventh, resolution had already taken place. In another child the disease assumed the character of typhoid fever, the symptoms of which disappeared when pneumonia manifested itself on the fifth day.

M. Besnier insists upon the peculiar interest of these cases in the study of infantile pneumonia.—*N. Y. Medical Record.*

MEDICAL DIARY OF THE WEEK.

Monday, 9, A.M., Massachusetts General Hospital, Med. Clinic. 9, A.M., City Hospital, Ophthalmic Clinic.

Tuesday, 9, A.M., City Hospital, Medical Clinic; 10, A.M., Medical Lecture. 9 to 11, A.M., Boston Dispensary. 10-11, A.M., Massachusetts Eye and Ear Infirmary.

Wednesday, 10 A.M., Massachusetts General Hospital Surgical Visit. 11 A.M., OPERATIONS.

Friday, 9, A.M., City Hospital, Ophthalmic Clinic; 10, A.M., Surgical Visit; 11, A.M., OPERATIONS. 9 to 11, A.M., Boston Dispensary.

Saturday, 10, A.M., Massachusetts General Hospital Surgical Visit; 11, A.M., OPERATIONS.

Pamphlets Received.—Annual Report of the Commissioner of Agriculture for the year 1868, to the President of the United States.—Physicians' Medical Compend and Pharmaceutical Formulæ. Compiled by Edward H. Hance. Pocket edition. Pp. 212. Philadelphia.—Scirrhous or Malignant Disease of the Rectum. By Alden March, M.D. (Re-printed from the Transactions of the New York State Medical Society for 1868.)—Sixteenth Annual Report of the Trustees of the Public Library of the city of Boston, 1868.

Deaths in Boston for the week ending Saturday noon, January 2d, 1869, 108. Males, 52—Females, 56.—Accident, 2—anæmia, 1—apoplexy, 3—disease of the bladder, 1—inflammation of the bowels, 1—congestion of the brain, 3—disease of the brain, 4—bronchitis, 2—cancer, 2—cholera infantum, 2—consumption, 15—convulsions, 4—croup, 8—debility, 1—diphtheria, 2—dropsy, 1—dropsy of the brain, 2—drowned, 1—dysentery, 1—epilepsy, 2—erysipelas, 1—scarlet fever, 8—typhoid fever, 1—gastritis, 1—disease of the heart, 3—intemperance, 1—laryngitis, 1—disease of the liver, 2—conges- of the lungs, 1—inflammation of the lungs, 10—measles, 3—old age, 5—premature birth, 1—puerperal disease, 1—rheumatism, 1—scrofula, 1—teething, 1—tumor, 1—unknown, 7.

Under 5 years of age, 41—between 5 and 20 years, 14—between 20 and 40 years, 15—between 40 and 60 years, 19—above 60 years, 19. Born in the United States, 78—Ireland, 21—other places, 9.